

BACKGROUND

Weight loss surgery (WLS) is the most effective long-term treatment for clinically severe obesity, while **weight loss medications (WLM)**, particularly GLP-1 agonists, have gained rapid popularity.

YouTube is a major source of patient health information; understanding differences in the quality and tone of videos discussing these treatment modalities is essential.

METHODS

- **Design:** Observational cross-sectional study
- **Setting:** Publicly accessible YouTube platform
- **Population:** English-language YouTube videos related to weight loss surgery (WLS) and weight loss medications (WLM; GLP-1 agonists)
- **Comparison:** WLS videos vs WLM videos
- **Primary Outcome:** Informational quality assessed using the DISCERN instrument and video tone (positive, neutral, negative)
- **Secondary Outcomes:** Uploader source, content type, view ratio, and engagement metrics
- **Analysis:** Descriptive statistics and nonparametric tests, including Mann-Whitney U and χ^2 tests ($p < 0.05$)

RESULTS

- A total of 129 WLS and 111 WLM videos were analyzed.
- WLM videos were predominantly commercial and informational, with higher DISCERN scores than WLS videos (46.69 vs 40.32; $p = 0.0366$).
- WLS videos more frequently had a positive tone, while WLM videos demonstrated a negative tone ($p < 0.01$).

Average DISCERN Score per Video Source

Source	WLS (Mean $\pm$ SD)	WLM (Mean $\pm$ SD)
Physician	40.57 $\pm$ 5.93	55.17 $\pm$ 6.83**
Nonphysician	37.5 $\pm$ 0	48.25 $\pm$ 48.25
Patient	37.38 $\pm$ 8.52	n/a
Commercial	40.63 $\pm$ 6.85	44.55 $\pm$ 7.98**
Academic	40.51 $\pm$ 10.4	46.25 $\pm$ 7.97
All Videos	40.32 $\pm$ 8.7*	46.69 $\pm$ 8.75*

*Statistically significant overall difference ($p = 0.0366$)

**Significant difference between physician and commercial videos within WLM ($p < 0.0001$)

WLS = weight loss surgery, WLM = weight loss medicine, SD = standard deviation

Percentage of Each Tone Score

Tone Score	WLS (n, %)	WLM (n, %)
Positive	78 (60.5%)	49 (44.1%)
Neutral	46 (35.7%)	46 (41.4%)
Negative	5 (3.9%)	16 (14.4%)
Total	129 (100%)	111 (100%)

WLS = weight loss surgery, WLM = weight loss medicine

LIMITATIONS

- Analysis reflects a single time point, and YouTube content may change over time.
- The DISCERN instrument, while validated, favors informational content and may undervalue patient experience videos.
- Tone assessment includes inherent subjectivity, despite multiple reviewers.

CONCLUSIONS

- YouTube videos on **WLM demonstrate higher informational quality but a less positive overall tone**, while **WLS videos are more positively framed but of lower quality**.
- These findings highlight variability in publicly available weight-loss content and underscore the need for improved, balanced patient education resources.

NEXT STEPS

- Assess patient comprehension after viewing WLS- and WLM-related videos.
- Call to action for high-quality, balanced educational content from academic institutions.